545.
标题: Photonic Signal Generation for Millimeter-Wave Communications
作者: Nanzer, JA (Nanzer, Jeffrey A.); Callahan, PT (Callahan, Patrick T.); Dennis, ML (Dennis, Michael L.); Clark, TR (Clark, Thomas R., Jr.)
来源出版物: JOHNS HOPKINS APL TECHNICAL DIGEST 卷: 30 期: 4 页: 299-308 出版年: 2012
在 Web of Science 中的被引频次: 0
被引频次合计: 0
引用的参考文献数: 21
摘要: Future wireless communications systems will require data rates on the order of 10 Gb/s and greater to support the increased desire for high-speed data transfer for applications such as wireless personal area networking. Millimeter-wave photonic systems represent a well-suited approach to such broadband wireless communications because of the large bandwidths that can be supported, the favorable propagation characteristics of millimeter-wave radiation, and the ability to remote broadband signals over long distances in optical fiber. This article outlines recent work on millimeter-wave photonic communications systems operating at 40 and 60 GHz, where data rates up to 3 Gb/s are demonstrated. Current research is being conducted on the development of an 80-GHz system with the goal of achieving 10 Gb/s over distances of 100 m.
入藏号: WOS:000303729800004
语种: English
文献类型: Article
KeyWords Plus: BRILLOUIN FIBER LASER; TERAHERTZ; TRANSMISSION; NOISE
地址: [Nanzer, Jeffrey A.; Callahan, Patrick T.; Dennis, Michael L.; Clark, Thomas R., Jr.] Johns Hopkins Univ, Appl Phys Lab, Laurel, MD 20703 USA
通讯作者地址: Nanzer, JA (通讯作者),Johns Hopkins Univ, Appl Phys Lab, Laurel, MD 20703 USA
电子邮件地址: jeffrey.nanzer@jhuapl.edu
出版商: JOHNS HOPKINS UNIV
出版商地址: APPLIED PHYSICS LABORATORY ATTN: TECHNICAL DIGEST JOHN HOPKINS RD, BLDG 1W-131, LAUREL, MD 20723-6099 USA
Web of Science 分类: Engineering, Multidisciplinary; Multidisciplinary Sciences
学科类别: Engineering; Science & Technology - Other Topics
IDS 号: 938JM
ISSN: 0270-5214
29 字符的来源出版物名称缩写: J HOPKINS APL TECH D
ISO 来源出版物缩写: Johns Hopkins APL Tech. Dig.
来源出版物页码计数: 10